Application No. 09/448,088

Remarks

Applicants thank the Examiner for his careful consideration of the application.

Claims 1-8 are pending in the application. Claims 1-8 stand rejected.

Claim Rejections 35 U.S.C. §103

Claims 1 and 4 were rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers et al (US 5,963,134) in view of Huang et al. (US 6,060,992). These rejections are respectfully traversed.

Claim 1 has been amended to include the limitations of claim 2. Therefore, Applicants refer the Examiner to Applicants' response to the rejections of claims 2 and 3 below. As claim 4 depends from claim 1, the Examiner should also allow claim 4 should claim 1 be allowed.

Claims 2 and 3 were rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,963,134 to Bowers et al. (the '134 patent) as modified by US Patent No. 6,060,992 to Huang et al. (the '992 patent) as applied to claim 1 and further in view of US Patent No. 5,463,463 to Harvey et al (the '463 patent). The rejection with respect to Claim 2 is moot, as claim 2 has been canceled. However, the limitation of claim 2 has been added to claim 1 and claim 3 has been rewritten in independent form (thereby neither narrowing nor expanding claim 3).

In claim 1, Applicants recite a system for identification and tracking of tags distributed in a room, which includes a laser base station for scanning laser beams, a tag reactive to incident laser beams to provide a data signal, and a tag tracking system receiving input from the laser base station, the tag tracking system storing state records of position and informational content of the tag, wherein the tag tracking system determines angular position of the tag with respect to the laser base station.

In claim 3, Applicants recite a system for identification and tracking of tags distributed in a room, which includes at least two laser base stations, a tag reactive to incident laser beams to provide a data signal, and a tag tracking system receiving input from the laser base station, the tag tracking system storing state records of position and informational content of the tag, wherein the tag tracking system determines absolute position of the tag based on input from at least two laser base stations.

The Examiner has failed to establish that the references suggest the desirability of the invention disclosed in claims 1 and 3. To sustain a prima facie case of obviousness based upon a combination of references, the Examiner must point to some suggestion to combine the references. "The prior art must suggest the desirability of the claimed invention. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed Cir. 1990). This suggestion must be found in the prior art, and cannot be based upon Applicants' disclosure. "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." Para-Ordnance Mfg. v. SGS Importers Int'l, 73 F.3d at 1087, 37 USPQ2d at 1239, citing W. L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13.

While Applicants do not acknowledge disclosure of the elements of the claimed invention by the references, Applicants submit that the Examiner has not identified any suggestion in any of the references to combine the various features allegedly taught by their respective references to achieve the invention claimed in this patent application.

Claims 1 and 3 should be allowed, as the Examiner has failed to identify a suggestion in either the references or the prior art generally to combine the patents to achieve Applicants' claimed invention. In claim 1, Applicants recite a tag tracking system that stores state records of position and informational content of the tag and determines angular position of the tag with respect to the laser base station. In claim 3, Applicants recite a tag tracking system storing state records of position and informational content of the tag, wherein the tag

tracking system determines absolute position of the tag based on input from at least two laser base stations. The Examiner relies upon the '463 patent for these features, yet the Examiner has not provided any suggestion or motivation to combine the disclosure of either the '134 or the '992 patent with the disclosure of the '463 patent. The Examiner has stated that it would be obvious to combine the disclosures of these three patents to achieve the invention recited in amended claim 1. However, the Examiner has pointed to nothing in either patent or the prior art in general that suggests the inventory system using RFID tags of the '134 patent or the mobile work-in-process parts tracking system should be combined with the optical motion sensor of the '463 patent to achieve Applicants' claimed invention. Other than a straightforward assertion that the combination would be obvious, the Examiner has failed to show that this motivation exists.

More precisely, there are two scenarios by which one skilled in the art might be motivated to combine the disclosures of the '463 patent with either the '134 patent or the '992 patent. In the first scenario, one skilled in the art considers adding the disclosure of the '463 patent to either the '134 or the '992 patent. In the second scenario, one skilled in the art considers adding the disclosure of either the '134 or the '992 patent to the disclosure of the '463 patent. The '134 patent and the '992 patent both relate to keeping track of objects. The '134 patent relates to an inventory system and the '992 patent relates to tracking the location of parts and parts containers. It appears that the primary concern is the location of the tagged objects. The Examiner has pointed to no part of either patent that suggests knowing the angular position of a tagged object would be helpful in any way. Alternatively, the '463 patent appears to be directed toward a method and apparatus for tracking both the rotational and translational movement of an object as it moves through space. The Examiner has pointed to nothing in either the '463 patent that suggests it would be advantageous to locating objects as disclosed in the '134 and '992 patents. Further, the '134 and '992 patents use the externally attached tags, and the Examiner has failed to show that one in possession of the

'463 patent would find it desirable to replace a target on a surface of an object with an separate tag.

As the Examiner has failed to point to any motivation in the prior art to combine the references, claims 1 and 3 should be allowed.

Claims 5-8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers et al as modified by Huang et al. as applied to claim 1 and further in view of Moran et al (6,005,482). As claims 5-8 depend from claim 1, the Examiner should also allow claims 5-8.

Claims 9-13 are new and should be patentable.

No additional fee is believed to be required for this amendment. However, the undersigned Xerox Corporation attorney hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE:

1. (Amended) A system for identification and tracking of tags distributed in a room, the system comprising,

a laser base station for scanning laser beams,

a tag reactive to incident laser beams to provide a data signal, and

a tag tracking system receiving input from the laser base station, the tag tracking system storing state records of position and informational content of the tag,

wherein the tag tracking system determines angular position of the tag with respect to the laser base station.

Claim 2 was canceled.

3. (Amended) A system for identification and tracking of tags distributed in a room, the system comprising, [The system of claim 1, further comprising]

at least two laser base stations,

a tag reactive to incident laser beams to provide a data signal, and

a tag tracking system receiving input from the laser base station, the tag tracking system storing state records of position and informational content of the tag, [and]

wherein the tag tracking system determines absolute position of the tag based on input from at least two laser base stations.

Claims 9-13 are new.

THE DOCUMENT COMPANY
XEROX

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PAGES TO FOLLOW (INCLUDING COVER SHEET): 9

SPECIAL INSTRUCTIONS OR MESSAGE:
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